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CDC/OHS Asbestos Management Plan

I. Introduction.

The CDC Asbestos Management Plan developed by the Industrial Hygiene Section, Office of Health and Safety (OHS) is intended to reduce and control the potential health hazards associated with employee exposure to asbestos-containing materials (ACM). This plan is based on OSHA and EPA regulations and good Industrial Hygiene practices. The policies and procedures outlined in the plan are required in order to protect the health of personnel and to comply with all applicable Federal and State regulations.

This Plan describes the philosophy with regard to asbestos management, assigns specific responsibilities for those involved in implementation of the program, commits the required resources to implement the program including training and conduct of inspections, surveys and assessments of facilities, and describes the procedures that must be implemented to conduct the required abatement actions.

II. Background

The term “asbestos” describes six naturally occurring fibrous minerals of which chrysotile, amosite, and crocidolite have been the most commonly used in building products. Asbestos in buildings has been widely used as a component in thermal system insulation, fireproofing, some floor coverings, ceiling tiles, cement pipe and sheeting, and acoustical and decorative treatment for ceilings and walls. Typically, it is found in pipe and boiler insulation and in spray-applied uses suchas fireproofing or sound deadening applications.

Exposure to airborne asbestos fibers has been associated with various diseases, including asbestosis, lung cancer, and mesothelioma. Due to its excellent insulation properties, asbestos was included as a component in numerous building materials. Asbestos is a much greater concern when it is in a friable condition. Friable ACM is defined as ACM that can be crumbled, pulverized or reduced to powder by hand pressure. Damaged non-friable (i.e. cement board, floor tile) and friable ACM have the potential to release asbestos fibers into the air due to external disturbances. Personnel may potentially be exposed to asbestos fibers in maintenance, renovation or demolition activities where ACM is involved.

In order to control the asbestos materials within a facility, various OSHA and EPA regulations have been instituted. These regulations provide safeguards designed to protect personnel who may come in contact with asbestos-containing materials during the normal course of their work duties. The development of proper procedures to handle existing ACM within CDC facilities has been compiled and are presented in this document.

III. Roles and Responsibilities

A. Office of Health and Safety

The Office of Health and Safety is responsible for overseeing personnel health and safety within CDC facilities. Inherent in this responsibility is the potential exposure of CDC personnel to asbestos during normal work activities, including renovations to occupied facilities. The primary responsibility for the successful implementation of the Asbestos Management Program, therefore, resides with OHS.

B. Chief, Industrial Hygiene Section

The Chief, Industrial Hygiene Section, OHS, is ultimately responsible for the oversight, implementation, and administration of the Asbestos Management Program. These duties include:

1. Appoints the Asbestos Program Manager (APM) who is responsible for day-to-day oversight of the program and assures that the APM is properly trained and supported to carry out designated responsibilities.

2. Makes needed decisions concerning program budgeting.

3. Resolves problems adversely affecting the efficiency of the Program.

4. Maintains oversight on the overall progresses of the Program.

5. Reviews needed corrective actions and schedules in coordination with other scheduled projects.

C. Asbestos Program Manager

The Asbestos Program Manager (APM) is the central responsible figure for asbestos control in this Plan. These duties include:

1. Review projects involving renovation, demolition and construction to determine whether ACM will be encountered. Provides guidance on the presence of ACM and what methods of abatement are to be used.

2. Ensures coordination and cooperation with the various CIO's with input in the program.

3. Coordinates and performs periodic facility surveys, annual visual inspections and assessments.

4. Maintains documentation of surveys, air monitoring data, and abatement project reports.

5. Provides oversight for abatement efforts and corrective actions.

6. Interacts with contractual support personnel and provides input in the procurement of services such as abatement and environmental monitoring.

7. Prioritizes maintenance efforts and corrective actions to address areas based on degree of risk and potential for causing health hazards.

8. Ensures all personnel involved in ACM abatement actions are properly trained in approved practices and procedures within their area of responsibility.

9. Develops work specifications and cost estimates for asbestos control activities to be performed by contractor personnel.

10. Ensures contract work is in compliance with contract documents as well as Federal and State asbestos regulations.

D. Office of Program Support

1. **Facility Engineering Office (FEO)** and **Design Construction and Maintenance Office (DCMO)**

FEO and DCMO personnel, including engineers, architects, supervisors, and tradesmen are often involved in activities that require coordination and communication with the APM to ensure that asbestos concerns are addressed. Their duties related to this plan include:

a. Coordinating projects and maintenance activities with the APM to identify any ACM in the affected area of the facility.

b. Notifying the APM of any damaged ACM or potentially hazardous situations involving ACM that they encounter.

c. Ensuring that all duties and procedures are carried out in a safe manner that complies with regulatory standards and protects workers and building occupants.

d. Ensuring that appropriate personnel are enrolled in the medical surveillance program for asbestos and respiratory protection.

e. Ensuring that protective measures are taken as necessary, including use of protective equipment, respiratory protection, warning signs, and preventing unauthorized entry into restricted areas.

f. Ensuring that all personnel involved in ACM abatement actions attend training classes as well as annual refresher training.

2. Procurement and Grants Office

The Procurement and Grants Office works with the Asbestos Program Manager in developing and procuring asbestos abatement services under an indefinite quantity task order contract.

IV. Surveillance and Assessment

In order to ensure that the Asbestos Management Plan is up-to date, periodic surveillance and reassessment of the condition of ACM will be conducted by knowledgeable and trained Asbestos Building Inspectors. This action will also assist in determining whether current operations and maintenance practices and procedures are adequate to protect building occupants from possible exposure to asbestos.

A. Surveys

Initial surveys have been conducted for CDC-owned facilities in the Atlanta area. The survey reports are maintained by the Asbestos Program Manager, and are available for review in the Office of Health and Safety, Roybal Campus, Bldg 1, Room B-67. These reports document the presence or absence of ACM in CDC-owned facilities, and contain descriptions of materials sampled, lab reports, physical and hazard assessments, building drawings, and photographs of materials. The physical and hazard assessments are used by the Asbestos Program Manager to determine the priorities and schedule of control actions to be taken.

B. Periodic Surveillance/Assessment

A surveillance of all ACM locations will be conducted at least annually in accordance with standard operating procedures for the purpose of detecting changes in the condition of ACM. Where damage or deterioration of friable ACM is identified, a risk assessment will be made to determine if any control action is required. Changes in condition or exposure factors resulting in a potential higher risk will be communicated to the APM as soon as possible. Air and/or bulk sampling will also be accomplished, as required, to assess releases of asbestos fibers or to supplement the physical and hazard assessment.

V. Asbestos Corrective Actions

Decisions for asbestos corrective actions will be prioritized according to the condition, potential for risk and disturbance of ACM. Corrective actions are classified according to the type of action and may include asbestos removal, encapsulation, enclosure, or administrative (administrative action may include the isolation of a facility or room to eliminate personnel exposure).

Trained individuals from a variety of trades (plumbers, boiler plant operators, electricians, carpenters) from FEO and DCMO will be relied upon to perform small-scale asbestos abatement at CDC facilities. This is normally limited to abatement or clean-up of no more than 3 square or linear feet of friable ACM, which is approximately the amount that can be contained within one standard glovebag. Oversight and personnel monitoring of the abatement activity will be conducted or coordinated by the APM and/or Industrial Hygiene Section to determine compliance with established procedures and regulations.

OHS will maintain a task-order contract with a licensed asbestos abatement firm in the local Atlanta area. This contract will be used to perform emergency abatement and response, disposal of waste generated by CDC in-house abatement activity, and other

abatement that is not performed as part of a larger construction or renovation project. The Procurement and Grants Office will specify the scope of work (size and dollars) to differentiate the project from a competitive large-scale procurement. Work will be performed according to established contract specifications. The contractor will be required to be available on a 24-hour notice to respond to emergency situations. The APM is responsible for ensuring that the abatement contractor submits all required documentation, permits, notifications, etc, for the specific project.

For large-scale abatement efforts as part of a project, a contractor will be selected to perform abatement activities in accordance with the scope of work and specifications supplied. This type of abatement may be included in the project funding and handled by the general contractor awarded the renovation or demolition contract, who would sub-contract with a licensed asbestos abatement firm. OHS will review the qualifications and submittals of all contractors performing abatement at CDC facilities.

VI. Notifications

Employee notification of asbestos abatement activities will be conducted prior to any scheduled abatement. This notification will be in the form of either a written communication to all affected employees or a general awareness meeting of these employees. In either case, the notification will be issued by the APM. In an emergency situation or fiber release episode where notification must be done after the fact, notification will take place within 24 hours or no later than the next work day.

The APM or abatement firm will provide written notification to the Georgia Division of Natural Resources, Environmental Protection Division, at least 10 working days prior to the start of asbestos abatement activities. Notification will include a description of the building or structure, including the size, age, prior use, and approximate amount of friable asbestos material present. Scheduled start and completion dates, and the location of the disposal site will also be included.

VII. Sampling Procedures

Sampling for asbestos fibers in air and in suspect building materials is necessary to ensure that building occupants and maintenance personnel are protected from inadvertent exposure and to assess the level of risk from the presence of asbestos. Sampling for asbestos will require close effective communication between the APM, maintenance workers, custodial workers, engineers, architects, contractors and building occupants.

A. Air Monitoring

Air monitoring is performed, either by in-house or contractor personnel, as follows:

- Following facility surveys in which damaged friable ACM is located.
- Prior to the start of an abatement or control action to serve as a post project comparison.
- During a control action to ensure the worker's permissible exposure level is not exceeded and that adequate respiratory protection and other control measures are used and effective.
- Upon completion of a control action as a means of certifying an area as safe for normal operations (clearance sampling).

Air monitoring conducted to determine employee exposures will be in accordance with OSHA 29 CFR 1926.1101(f). Air samples will be analyzed by a laboratory that successfully participates in the American Industrial Hygiene Association (AIHA) Proficiency Analytical Testing (PAT) Program for phase contrast microscopy and/or the National Institute for Standards and Technology (NIST) National Voluntary Laboratory Accreditation Program (NVLAP) for transmission electron microscopy (TEM). TEM analysis will be used for clearance sampling following abatement in occupied areas. The APM will maintain records and documentation of all asbestos air sampling performed at CDC.

B. Bulk Sampling

Bulk sampling of suspect building materials will be conducted during periodic surveillance, prior to demolition or renovation, and whenever there is any doubt as to the material's content. Bulk sampling will be performed in accordance with EPA's Asbestos Hazard Emergency Response Act requirements. The APM will maintain all records and documentation of bulk sampling.

VIII. Training

The APM and others responsible for the success of the Asbestos Management Program will complete the following EPA-approved courses:

- 5 day Asbestos Building Inspector and Management Planner course.
- 4 day Asbestos Abatement Project Supervision course.
- One-day updates of each of the above-mentioned courses completed annually.

Selected individuals within FEO and DCMO will complete the Asbestos Operations and Maintenance course which allows them to perform small-scale abatement jobs. This training consists of an initial 16-hour class with annual refresher training Personnel from the General Maintenance Shop, FEO, attend an 8-hour course specifically on removal of vinyl asbestos floor tile. These courses also require annual refresher training.

All other maintenance and custodial staff who may encounter ACM in their work will attend a 2-hour asbestos awareness course provided by the Asbestos Program Manager. This course will:

- Provide an overview of the hazards and nature of asbestos
- Give guidance on how to recognize suspect ACM
- Describe the elements of CDC's asbestos program.
- Inform maintenance and custodial personnel as to routine activities that can cause inadvertent disturbance of ACM and preventative measures to be followed.
- Outline the locations of ACM in CDC buildings.

IX. Emergency Response Actions

The Asbestos Program Manager will be notified immediately when a known or suspected release of airborne asbestos fibers has occurred, or when an operation (maintenance, construction, renovation, demolition) is about to take place that could result in disturbance of ACM. The APM will ensure the following actions are taken:

- Inspect the area to confirm and assess the extent of release or disturbance.
- Isolate the contaminated area to prevent unauthorized entry by unprotected personnel.
- Prevent further distribution of asbestos fibers by having the HVAC shutdown, if practical, and/or by sealing doors, windows or other openings with 6 mil plastic sheeting.

- **For minor releases,** personnel will perform clean up or abatement using proper techniques (wet methods, HEPA vacuuming), place all waste in double asbestos waste bags and seal with duct tape, and then seal remaining ACM with encapsulant.

- **For major releases**, abatement contractors will be required to complete corrective actions.

- Perform aggressive air monitoring to ensure the area is adequately clean and suitable for occupancy.

X. Recordkeeping

The Asbestos Program Manager will maintain copies of all asbestos building inspections, air monitoring and bulk sampling results, sample data sheets, training certificates, asbestos program standard operating procedures, task orders, and any other asbestos program documentation. All records shall be maintained in the Office of Health and Safety, Roybal Campus, Building 1, Room B-67.